

R E P O R T R E S U M E S

ED 003 000

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THE STANDARDIZATION OF THE THIRD REVISION OF THE
STANFORD-BINET INTELLIGENCE SCALE ON NEGRO ELEMENTARY SCHOOL
CHILDREN IN GRADES ONE, TWO, AND THREE IN THE SOUTHEASTERN
UNITED STATES.

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REPORT NUMBER CRP-954

PUB DATE AUG 62

EDRS PRICE MF-\$0.18 HC-\$3.48 87P.

DESCRIPTORS- *PSYCHOLOGICAL TESTS, *PSYCHOMETRICS,
MEASUREMENT, *NEGRO STUDENTS, *PRIMARY GRADES,
QUESTIONNAIRES, *SOCIOECONOMIC STATUS, REGIONAL PROGRAMS,
STANFORD BINET INTELLIGENCE SCALE, TALLAHASSEE, ALABAMA,
FLORIDA, GEORGIA, SOUTH CAROLINA, TENNESSEE

THE OBJECTIVES OF THIS STUDY WERE TO PROVIDE NORMS FOR
NEGRO CHILDREN IN THE SOUTHEASTERN UNITED STATES ON THE THIRD
REVISION OF THE STANFORD-BINET INTELLIGENCE SCALE. SUBJECTS
WERE DRAWN FROM THREE COUNTY SCHOOL SYSTEMS IN EACH OF THE
STATES OF ALABAMA, GEORGIA, FLORIDA, SOUTH CAROLINA, AND
TENNESSEE. EXAMINERS WERE TRAINED FOR UNIFORMITY OF
PROCEDURE. DEMOGRAPHIC QUESTIONNAIRES WERE ADMINISTERED TO
PARENTS. THE 900 CHILDREN WERE ADMINISTERED THE TEST AT THE
FIRST-, SECOND-, AND THIRD-GRADE LEVELS. ITEM ANALYSIS WAS
PERFORMED TO DETERMINE APPROPRIATENESS OF ITEMS AT EACH AGE
LEVEL, AND CORRELATIONS MADE BETWEEN DEMOGRAPHIC AND
BIOGRAPHIC DATA AND THE INTELLIGENCE AND ACHIEVEMENT MEASURES
OBTAINED. AN ANALYSIS OF THE RESULTS INDICATED THAT THE MEAN
IQ OF THE TOTAL GROUP WAS 80.82 AND THE STANDARD DEVIATION,
12.40. NO SIGNIFICANT DIFFERENCES IN IQ WERE FOUND BETWEEN
THE GRADES AND SEXES ALTHOUGH THERE WERE SIGNIFICANT
DIFFERENCES IN IQ FOR AGE, SOCIOECONOMIC STATUS, AND
COMMUNITY SIZE BEYOND THE .01 LEVEL. RESULTS INDICATE THAT
THERE IS NEARLY A 20-POINT IQ DIFFERENCE BETWEEN THE MEAN
STANDARDIZATION SCORE OF THE 1960 STANFORD-BINET AND THE MEAN
OF THIS SAMPLE. (HB)

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FLORIDA STATE UNIVERSITY

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INTELLIGENCE SCALE ON NEGRO ELEMENTARY-SCHOOL CHILDREN IN
GRADES ONE, TWO, AND THREE IN THE
SOUTHEASTERN UNITED STATES

By
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A Dissertation
Submitted to the Graduate School of
Florida State University in partial
fulfillment of the requirements for
the degree of Doctor of Philosophy

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August, 1962

ED003000

Acknowledgments

The author would like to express his sincere appreciation to Dr. Wallace A. Kennedy for his help in directing this research and to the other members of the committee for their helpful suggestions. A special note of appreciation is extended to the graduate students who aided in data collection, Mr. Thomas E. own who performed the computer work, and the staff of the Human Development Clinic who performed the necessary secretarial work. Special acknowledgment is also made to the county administrators, principals and teachers who cooperated in the research.

The research reported herein was supported through the Cooperative Research Program of the Office of Education, U.S. Department of Health, Education and Welfare, C.R.P. 954.

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Within the past half century a large number of publications including several books and over 250 articles have been produced which concern the results of intelligence tests administered to American Negroes. Many of the authors of these publications dealt with the problems involved in studying the intelligence of Negroes, and several drew conclusions from their studies or reviews of the literature as to the causal factors affecting the difference in Negro and Caucasian scores.

Major reviews of Negro intelligence test performance have been done by Peterson (1923), Pintner (1931), Garth (1931), Klineberg (1944), Canady (1946), North (1957), Shuey (1958), Dreger and Miller (1960), and Weyl (1960). Each of these reviews found that Negroes generally score lower than white subjects, or norms based on white subjects, when administered standardized intelligence tests.

The most complete and thorough review of the results of the intelligence tests administered to Negroes has been done by Shuey (1958). Her review included 35 monographs or books, 135 journal articles, 47 reviews, critiques, or comments, 62 unpublished master's theses, and 9 unpublished doctoral dissertations. One hundred and seventy of these publications dealt with original investigations of Negro intelligence which had been carried out in the forty-year period preceding Shuey's publication. Although a comprehensive review of Shuey's work is not feasible here, a brief summary, stressing particularly the studies dealing with school children, will be presented along with her conclusions.

In thirty of the studies reviewed by Shuey, individual intelligence tests were administered to a total of 6,337 Negro school children.

In one of the eighteen studies in which white subjects were also included, the Negro mean equalled that of the white group. In three of the twelve studies which did not include white subjects, the group of Negro subjects surpassed the mean of the norms for white children. Two of the three studies, however, are questionable as the subjects may not have been randomly selected. In all the remaining studies the Negro children were below the mean.

Shuey reported on studies done using both verbal and nonverbal group intelligence tests. Thirty-one studies in which a nonverbal test was administered to a total of 10,900 Negro children and seventy-two studies in which verbal tests were administered to about 36,000 Negro school children were included. In fourteen of the nonverbal studies, white children were included and in all instances their average scores were above those of Negroes from the same locality. However, in one study in which urban Negro and rural white children were compared, the Negro surpassed the white subjects. In the seventeen studies in which white subjects were not included, all but one showed the Negro subjects to be below white norms. In thirty-five of the studies on verbal tests white children were included and their average score was again higher than the average for the Negroes in each study. In the remaining thirty-seven studies, Negro children were compared with test norms and only in one case did the Negro average exceed that of the norms based on white groups.

Shuey reviewed also some studies involving North-South comparisons and rural-urban comparisons of Negroes in which the Northern and urban children scored higher. In addition to her observation that urban Negro children score from 4 to 6 IQ points higher than the rural, Shuey

noted that children from Northern and border urban areas score 6 to 9 points higher than those from Southern urban areas.

Other observations made from the studies were that younger children typically score higher than older ones and adults and that white samples usually show greater variability on intelligence tests than do Negro, suggesting that the Negro groups are more homogeneous. Also, there are several particular kinds of test items on which Negroes typically do well, such as rote memory and immediate memory test items.

In addition to studies on younger school children, Shuey reviewed intelligence test results on over 9,000 high school students and about 12,000 college students. In these cases, too, the white students scored consistently higher than the Negro students. The same trend is found in tests given in the armed services.

Besides the studies on school children, Shuey reported nine investigations involving a total of 1,173 Negro pre-school children ranging in age from two to six years. In seven of the nine studies either the 1916 or 1937 Stanford-Binet was used. The mean Binet IQ for the groups of Negro children ranged from 92.5 to 100.8 with an over-all mean of 96.3 for the 1,045 subjects. The mean Binet IQs for the white samples which were included in five of the studies ranged from 103 to 112 with an over-all mean of 105.9 for the 12,579 subjects. Since most of these children were either in kindergarten or nursery school, neither the white nor the Negro groups represented a random sample of pre-school children. Nevertheless, it is significant that the difference between Negro and white subjects in terms of IQ scores is not as great at this age as at later ages, and that both means fall within the normal range of intelligence as based on norms of white children.

In her concluding statements, Shuey declared that the intelligence test results "point to the presence of some native difference between Negroes and whites . . ." (Shuey, 1958, p. 318). She mentioned earlier, however, that the majority of authors of general psychology textbooks state that the evidence is inconclusive, but that they definitely favor the environmental interpretation. Also, there is much disagreement among the authors of the investigations with regard to the causal factors resulting in the difference in Negro and white intelligence test results. Some authors stress the role that heredity plays, while others rely on environment alone to account for the differences. Still others mention other factors, such as structure and standardization of the intelligence test, motivation, examiner-subject interaction, and racial prejudices of testers and investigators. Another group maintains that the variables affecting the difference in scores have not all been identified and controlled and, therefore, no conclusions with regard to the difference may be justifiably drawn. Thus, there is great divergence in the interpretation given to the results of intelligence tests administered to Negro subjects.

Since the present research uses the Binet Intelligence Scale, further analysis of the research done in this area using the Binet tests is warranted, along with a brief history of the Binet scales.

In the late 1800's Alfred Binet, a French psychologist studying such various mental processes as attention, judgment and reasoning, became interested in the differentiation of bright and dull children. Thus, he quite willingly agreed when the Ministry of Public Instruction of Paris requested him to aid in choosing students, who did not have an adequate capacity for education, to be placed in special classes in which

they would not have to meet the regular standards. Working from the assumption that a child of a given age is of average intelligence if he can perform the same tasks most other children his age are able to perform, Binet constructed the first Binet scale in 1905. This scale was revised in 1908 and 1911 with the primary change being the arrangement of the items in order of difficulty.

In 1910, before Binet's second revision, Lewis M. Terman began experimenting with the Binet tests in the United States. In the same year, Goddard published a translation and revision of the Binet-Simon Scale, which was the first form of the Binet scale to be administered to a sample of Negro school children. Strong (1913), followed by Odum (1913), was the first to publish Goddard-Binet results from Negro school children. Following their example were Phillips (1914), Sumne (1917), and Wells (1923).

In 1915, Yerkes, Bridges, and Harshwick published their Point Scale which consisted of 19 subtests taken from the Binet Scale and one additional test. They introduced the concept of partial credit and arranged the subtests in ascending order of difficulty. This test was used by Sumne (1917; 1925) and Peterson and Lanier (1929) to test the intelligence of Negro school children.

The results of Terman's research were published in 1916 in the form of the Stanford Revision of the Binet Scale, designed to measure the intellectual performance of white American persons from age three to adulthood. Terman's improvements included an addition of subtests of a heterogeneous nature, raising the number of subtests from Binet's 54 to 90, and the development of detailed instructions for the administration and scoring of each subtest. Although the very popular test became a

validity for other tests (Cronbach, 1949), it was not standardized on Negroes, nor were there any Negroes included in the standardization sample. Studies using the 1916 Stanford-Binet and including a sample of Negro school children were those of Schwabler and Winn (1920), Barnes (1921), Arlitt (1921; 1922), Sumne (1925), Graham (1926), Lacy (1926), Strachan (1926), Beckham (1933), Long (1933), Lambeth and Lanier (1933), Klineberg (1935), and Bruce (1940).

When, in 1937, Terman and Merrill published Forms L and M of the Stanford-Binet (Terman and Merrill, 1937), their standardization sample included 3,184 native-born white subjects and no Negroes. The new revision did provide a wider sampling of ability than the earlier scale with Forms L and M consisting of 209 and 199 subtests respectively. The investigators using the 1937 Revision to test Negro school children were Clarke (1941), Jenkins (1943), Tomlinson (1944), Klugman (1944), Higgins and Sivers (1958), and McCord and Demerath (1958).

A summary of the studies using the Binet Scale to test Negro school children is presented in Table 1.

Insert Table 1 about here

Up to the time of this research, no other study has been published using the Third Revision of the Stanford-Binet Scale on a Negro sample.

At no time throughout the history and development of the Binet scales have Negro children been included in the standardization samples and at no earlier time has any investigator attempted to establish norms

for Negro children or standardize a major intelligence test on a large Negro sample.

It is evident from this review of the literature that Negro school children typically receive lower scores on intelligence tests than do white school children. Many of the authors offer interpretations of this test difference. Nearly all conclude that environmental differences play the major role, while a minority maintains that genetic differences account for it. Before an interpretation of this difference can be properly evaluated, however, the problems affecting the interpretation and evaluation of intelligence test scores of Negroes and the variables affecting the results must be considered. The following nine problems and variables have been mentioned and discussed by various authors.

1. **Standardization on a white sample.** When one cultural group is administered an intelligence test which has been constructed for and standardized on another cultural group, the former consistently scores lower (Canady, 1946; Shimberg, 1929). When this effect is applied to the present situation, the Negroes would be expected to score below norms based on a white sample.

2. **Socio-economic status and caste systems.** A number of studies have shown that people of lower socio-economic status typically receive lower intelligence scores than those from higher socio-economic backgrounds (Dreger & Miller, 1960; Klineberg, 1944). In addition, Negroes as a group not only are of a lower socio-economic status but also form a separate caste system in many parts of the United States in which they are denied many of the social opportunities available even to the very lowest class of Caucasians.

3. Language. A number of investigators have commented that the language used by many Negroes differs considerably from that used by most American Caucasians (Dreger & Miller, 1960; Klineberg, 1944). As language is an important part of most intelligence tests and as they are standardized on white samples, the language factor represents a handicap to the Negro subject.

4. Education. Because education has been identified as an influential factor in intelligence tests, the inferiority of the Negro schools, particularly in the south, has been another great handicap to Negro performance (Klineberg, 1944).

5. Definition of "race." Several investigators and reviewers comment that many individuals classified as Negro have white ancestors. A similar problem is encountered when the various physical characteristics associated with the Negroid race do not hold true for a particular individual (Canady, 1946; Dreger & Miller, 1960).

6. Motivation. In line with the evidence that various cultural groups differ in their motivation to perform well on tests, several investigators have observed that Negroes are not as highly motivated or are motivated in different ways than Caucasians in the United States (Klineberg, 1944).

7. Rapport. The interaction of a white or Negro examiner on Negro subjects has not been adequately examined (Garth, 1931; Dreger & Miller, 1960).

8. Selective migration. Selective migration may play a role in the higher scores of northern Negroes (Shuey, 1958).

9. Inadequate sampling. Care must be taken in generalizing from a sample to the total population. None of the studies on

intelligence done up to date can be considered to have an adequate sample of the American Negro (Dreger & Miller, 1960).

In view of these variables which have not been adequately controlled and in view of the present status of intelligence tests, it is impossible to isolate the effects of "race" on intelligence test scores. Most investigators and psychologists working in this area believe that "race" per se does not play a role in intelligence test scores and that intelligence is normally distributed with respect to race. However, where the role of one group in a culture differs from that of another group, a difference is manifested in intelligence test performance. The greater the difference in cultural roles the greater the difference in performance on intelligence tests. Thus, there is evidence that environment does affect intelligence test scores.

Therefore, what is needed is not further evidence of differences between sample scores, but broad normative data on a Negro sample to make intelligence test findings in this group more meaningful.

Problem

Since such a discrepancy exists between the scores of white children and the scores obtained by Negro children on standardized intelligence tests, one of the most pressing needs in the fields of psychology and education today is the development of an adequate instrument for the intellectual evaluation of the majority of Negro children in the southeastern United States. Canady has clearly pointed out this need. He writes:

It is significant that, almost without exception, all measurements of the Negro have been made with tests standardized chiefly on Northern urban whites. Such a procedure is unjustifiable, for tests are

applicable only to individuals similar in their experiential background to the group upon whom they were standardized. When we administer these tests to individuals from widely differing social, economic, and educational levels, we violate not only the original aim of mental testers, but also the basic assumption of the intelligence test method. . . .

The unsuitability of attempting to evaluate the intelligence produced by one culture in terms of another and the decided advantage to the group in which the tests arose is obvious. But what is not so obvious, although none the less a fact, is that a subgroup within a nation that has had inadequate participation in cultural opportunities will be handicapped in much the same way as one belonging to a wholly alien culture. If, therefore, it can be demonstrated that the experiential background of the American Negro child differs appreciably from that of the whites upon whom the tests were standardized the test results may not be used as a measure of the relative innate ability of the two groups. (Canady, 1946, pp. 411-412.)

Canady cites several references to substantiate his assumption of a considerable difference between Negro and white cultures in the United States.

The most widely used test for the evaluation of individual intellectual functioning in the United States for school children is the Stanford-Binet (Cronbach, 1949). At the present time, some 24 years after the second revision of this test, there are still no adequate norms available for the evaluation of Negro elementary-school children in the southeastern United States. In the coming decade, perhaps the most important decade in the history of the education of Negro children in the

United States, it is essential that an instrument be provided for adequate evaluation of their intellectual ability.

With the publication of the Third Revision of the Stanford-Binet Intelligence Scale (Terman & Merrill, 1960), the time has arrived to provide educators and researchers with the norms essential to their work with this population of school children.

The purpose of this research, therefore, was to standardize the Third Revision of the Stanford-Binet Intelligence Scale on a large representative sample of Negro elementary-school children in grades one, two, and three in the southeastern United States and to determine the effect of social class and community size on the IQ scores of these children.

Method

The Intelligence Scale

The intelligence scale used in this research was the 1960 Revision of the Stanford-Binet Intelligence Scale, Form L-M (Terman & Merrill, 1960). This individual intelligence test consists of a total of 142 items divided into twenty age levels, each of which has six items and an alternate except for the average adult level which has eight items and an alternate. The items consist primarily of opposite and direct analogies, comprehension, similarities and differences, vocabulary, verbal and pictorial completions, absurdities, memory of meaningful material and digits, and drawing designs. Form L-M is based on the same rationale as the previous Binet tests, i.e., an individual is considered of average intelligence if he can perform the intellectual functions that most people his age are able to perform, of above average intelligence if he can perform tasks which most people his

age cannot perform, and of below average intelligence if he cannot perform the tasks which most people his age can. Intelligence is thus regarded as a general mental adaptability as based on age standards of performance.

The 1960 Revision was constructed by selecting subtests from Form L and Form M which were standardized in the 1930's. The items used in Form L-M were selected on the basis of the performance on Forms L and M of 4,298 subjects, from ages 2½ to 18, tested primarily during the years 1950 to 1954. Form L-M was administered to 100 six-year-olds and 100 fifteen-year-olds. Of this total group, over half, 2,355, were from California, while 1,058 were from Minnesota, 892 from New Jersey, 102 from Iowa, and 91 from Massachusetts. This standardization sample appears to be very inadequate in that the sample cannot be considered representative of the United States as some parts of the country are not represented, and as all but 200 of the subjects were administered either Form L or Form M, rather than Form L-M. However, the authors also took into consideration other results from the 1937 Revision so that the best subtests from Form L and Form M, as determined by item difficulty, internal consistency, and cultural relevance, were combined to make Form L-M.

The IQ tables in the 1960 Revision are changed somewhat in that the new intelligence quotients represent a deviation or standard score IQ for ages 2 through 18. According to the authors:

The revised IQ tables present deviation, or standard score, IQs for ages 2 through 18. These revised IQs avoid the inadequacies of the conventional ratio IQs ($\frac{MA}{CA} \times 100$) in that (a) a given IQ now

indicates the same relative ability at different ages (b) a subject's IQ score, ignoring errors of measurement, remains the same from one age to another unless there is a change in ability level, and (c) a given change in IQ indicates the same amount of change in relative standing regardless of the ability level of the subject. (Terman & Merrill, 1960, pp. 27-28.)

The revised IQ tables are designed to yield a mean of 100 and a standard deviation of 16. These tables represent smoothed values for the combined L and M standard deviations at all age levels.

The authors report that the validity of Form L-M should be superior to the 1937 scale since:

The choice of items according to mental age on the 1937 scale assures that the new scale is measuring the same thing that was measured by the original scale. Secondly, regular increase in mental age from one age to the next checked with increase in percent passing from one chronological age to the next in both forms of the 1937 scale. And thirdly, the choice of items was determined by their correlation with total score on each form. (Terman & Merrill, 1960, pp. 32-33.)

Subjects

Subjects for this research consisted of 900 Negro elementary-school children, 300 from each of the first three grades. The subjects were taken from the public school systems of the five southeastern states of Alabama, Georgia, Florida, South Carolina, and Tennessee. These states were selected because of the availability of the state education departments' cooperation, because of their nearness to Florida State

University, and because the Negro elementary-school population in these states was believed to be representative of the southeastern United States.

Three county school systems were selected from each state on the basis of size and representativeness. A large, medium, and small county, using the number of Negro elementary-school children as a criterion of size, were selected. Figure 1 gives a graphic presentation of the location of the counties in each state.

Insert Figure 1 about here

A stratified random sample of the entire Negro elementary-school enrollment was then obtained from each of these county school systems. Twenty students at each grade level from one to three were selected in each county, making a sample of 60 for each county and 180 for each state. A description of the parent population of Negroes from the five states was made from the 1950 and 1960 Census data and this description was compared with the sample in order to determine the representativeness of the sample.

Procedure

Prior to testing in each county, the purpose and the nature of the research was discussed with the superintendent and guidance director of the county and permission to carry out the research in that county was obtained from them. Following this, each of the school principals was visited and a random sample of the students was selected from each grade being tested in that school. When there was more than one section of a particular grade, the subjects were selected from all classrooms.

A table of random numbers was used to select the subjects from the alphabetized roll of the teacher.

Each of the 990 children selected was administered the Third Revision of the Stanford-Binet Intelligence Scale by a trained examiner in the school setting. The standard procedure described by Terman and Merrill (1960) was followed with the one exception that the alternate subtest for each age level was given in addition to the regular subtests. All twelve examiners had been trained at the Human Development Clinic. Most of the group were experienced testers prior to the beginning of the training course, but for the sake of uniformity, all examiners took the complete training session. Their work was periodically checked by team captains in the field and their examining techniques were observed from time to time by Dr. Kennedy, Chairman of the Human Development Clinic at Florida State University.

A pass-fail decision for each test item was made by the examiner in the field, but test analysis was performed after returning to campus. All scoring was checked by team captains and the calculations were checked by computer. All analyses of the data were performed on the IBM 650 computer with programs which had been checked out on a test deck on which hand calculations were run.

In addition to the intelligence test, a demographic questionnaire including items on community size, socio-economic status, birth date, sex, month of administration, grade, school, county and state was obtained by the examiner from the cumulative record and the classroom teacher.

The California Achievement Test and the Goodenough Draw-a-Man Test were also administered to the same sample, although these data were not used in the present research, they will be used by other investigators.

This research was financed by a grant from the Office of Education, United States Department of Health, Education and Welfare. It was under the direction and supervision of Wallace A. Kennedy, Assistant Professor of Psychology and Chairman of the Human Development Clinic at Florida State University.

Description of Parent Population and Comparison with Sample

In order to evaluate how representative the sample of Negro elementary-school children was of the Negro population in the states of Alabama, Florida, Georgia, South Carolina, and Tennessee, a comparison was made between the parent population, i.e., all Negroes residing in the five southeastern states (U.S. Census, 1960), and the sample.

There are approximately 4,399,220 Negroes living in the Southeast as determined by the 1960 Census data, which constitutes 24% of the total population of these five states. During the decade of 1950 to 1960, there was an increase in over-all Negro population in the Southeast of 401,060, with an increase of about 10% in the number of children in the age range of the sample. Table 2 indicates the number and percentage of Negroes in the total population for the five states.

Insert Table 2 about here

One metropolitan, urban, and rural county was chosen in each of the five states. The combined Negro population in the metropolitan counties chosen for the study was 1,069,395. The Negro population in the urban counties selected was 160,525, and the total Negro population in the rural counties was 83,361, as indicated by the 1960 Census. The

population distribution of Negroes in the Southeast with respect to size of community is given in Table 3. For example, in the state of Alabama, Jefferson County, the metropolitan county, there were 219,663 Negroes representing 34.6% of the population of that county.

Insert Table 3 about here

As the 1960 occupational distribution of the Southeast was not available at the time of this report, the 1950 Census data were used to describe the major occupational groups of the parent population. The major occupational groups listed in the Census report were divided into seven classifications according to the McGuire-White Scale (1955) for convenient comparison and the results of this division for the five states are presented in Table 4. The McGuire-White Scale value of 1 is the highest classification and 7 is the lowest.

Insert Table 4 about here

Tables 5 through 9 show the occupational breakdown for the five states presented separately. The three counties from which the sample was drawn in Alabama were Clarke, Houston, and Jefferson. The distribution of the occupations of the Negro population in these counties is presented in Table 5.

Insert Table 5 about here

In Florida, the three counties selected were Escambia, Gadsden, and Dade. The occupational distribution for these counties is presented in Table 6.

Insert Table 6 about here

Brooks, Fulton, and Dougherty were the three counties selected from the state of Georgia. The occupational distribution of the Negroes in these counties is presented in Table 7.

Insert Table 7 about here

The three counties selected from South Carolina were Greenville, Richland, and Sumter. The occupations of these counties were distributed as presented in Table 8.

Insert Table 8 about here

Lincoln, Hamilton, and Shelby counties were selected from Tennessee and the distribution of occupations for Negroes in these counties is presented in Table 9.

Insert Table 9 about here

As can be observed from these tables, there is, in the Negro population of the five states involved, a consistent trend in the occupational distribution toward the lower occupational levels. The

largest group of Negroes falls into Group 7 of the McGuire-White Scale, which is the lowest occupational classification. This category includes odd-job workers, domestic help, unskilled laborers, and the unemployed. This trend is consistent also for the fifteen counties from which the sample was drawn.

Parental education is also a factor in the McGuire-White Scale in determining socio-economic status. The educational attainment of the parent population was taken from the 1950 Census. The census data were converted into McGuire-White Scale values from 1 to 7 so that comparisons could be made. Since the census report does not place graduate work in a separate category, the first two classifications of the McGuire-White Scale were combined to include four or more years of college. The scale value of 3 represents two or more years of college. A scale rating of 4 indicates the individual's graduation from high school or completion of an equivalent secondary education, whereas a scale value of 5 indicates the individual attended high school, completing grade nine, but not graduating. For persons born prior to 1900, grade eight was equivalent to grade nine. A scale value of 6 represents an eighth-grade education or the completion of grade four to seven for individuals born prior to 1900. A scale rating of 7 indicates that the individual left elementary or junior high school before completing grade eight, or, in cases of persons born prior to 1900, grade three.

The data describing the distribution of the educational levels of Negroes 25 years of age or over in the five states were combined and presented in Table 10.

Insert Table 10 about here

The same data for each state are presented in Tables 11 through 15.

Insert Tables 11-15 about here

The educational attainment of the Negroes in the Southeast clusters toward the lower end of the McGuire-White Scale. Approximately three-fourths of the population over 25 years of age falls into classification 7, the lowest category of the Scale.

When the data on socio-economic level of the parents of the sample were analyzed, it was found that the sample clustered toward the lower end of the Scale, as was true for the parent population. With respect to educational attainment of the parents of the subjects in the sample, 15.5% did not finish the eighth grade, but most of the parents received at least an eighth grade education and 5.4% attended college for at least two years. Table 16 presents the educational attainment of the subjects' parents, along with the percentages in each of the McGuire-White classifications.

Insert Table 16 about here

The occupational distribution of the sample presented in Table 17 shows that the occupations tend to be on the lower end of the McGuire-White Scale with 69.8% falling into categories 6 and 7. About 1% fall in the upper two categories. These data are comparable to the census description of the parent population.

Insert Table 17 about here

A comparison of the sample with the parent population as broken down into states, counties, and community size, as well as socio-economic status indicates that there is no great difference in the characteristics of the sample and the parent population. Thus, the sample can be considered as quite representative of the population from which it was drawn as based on a comparison with United States Census data.

Results

The results of the Stanford-Binet test administered to the 900 first-, second-, and third-grade Negro elementary-school children are presented in terms of IQ scores obtained for each grade, age, socio-economic level, community size, sex, and for the entire sample. Also, a distribution is given showing percentile ranks of the IQ scores within the range obtained. An item analysis of the subtests will be presented showing the internal consistency of the items and item difficulty will be presented for each grade and for the total sample. Results in terms of mental age will be given for each sex, each grade, and for the total sample.

Table 18 contains the frequency distribution, cumulative frequencies, and percentiles of the Binet IQs for the 900 Negro elementary-school children in the sample.

Insert Table 18 about here

Table 19 presents the IQ percentile equivalents for the Negro sample and the comparable data from the standardization sample for the 1937 Revision of the Binet. This table contains probably the most important data in this study. From this data a comparison can be made between the two samples and Negro IQs can be converted directly into percentile scores as based on the sample.

Insert Table 19 about here

Table 20 shows that the mean IQ for the total group of 900 subjects was 80.82 and the standard deviation 12.40, with the 464 boys obtaining a mean of 81.27 and a standard deviation of 11.84, while the 436 girls obtained a mean of 80.33 and a standard deviation of 12.95. This difference is not statistically significant.

Insert Table 20 about here

As can be seen from Tables 19 and 20, the Negro IQ distribution is more leptokurtic and has a narrower range as compared with Terman and Merrill's data on the 1937 Stanford-Binet in which the mean IQ was 101.8 and the standard deviation 16.4, and as compared with the adjusted tables of the 1960 Stanford-Binet which has a mean of 100 and a standard deviation of 16.

Table 21 presents the Binet IQ means and standard deviations by chronological age. Because the stratification of the sample was based on grade without control for age, there is a difference in the frequencies at each chronological age. As can be seen from Table 21, there

is a drop in IQ as age increases. An analysis of variance shows this difference to be significant at the .01 level with an F of 14.1. These data are in keeping with the findings of previous investigators (Shuey, 1958).

Insert Table 21 about here

Table 22 gives the Binet IQ means and standard deviations by grade. There is no significant difference between the mean IQs of the three grades as there was when ages were compared. These data are not consistent with the prevailing opinion that Negro children's IQs drop as they progress through the grades (Shuey, 1958).

Insert Table 22 about here

Table 23 contains the Stanford-Binet IQ means and standard deviations by socio-economic level as determined by the McGuire-White Index of socio-economic status. As can be seen from the table, there is a direct relationship between socio-economic level and IQ. This difference is significant beyond the .01 level with an F of 20.6. It is also important to note that the frequency at each level is inversely related to socio-economic status with only 2 subjects at the upper level and 436 at the lower level. There were 265 students for whom no socio-economic data could be obtained.

Insert Table 23 about here

Table 24 contains the Stanford-Binet IQ means and standard deviations for each community size. The mean for the children from the metropolitan areas was 84.33, that for the urban areas 78.28, and for the rural children it was 79.86. An F test of these data indicates that this difference is significant at the .01 level.

Insert Table 24 about here

Although there is a close relationship between mental age and IQ on the 1960 Stanford-Binet as can be seen from the discussion of the test, this relationship is not one of $IQ = \frac{MA}{CA} \times 100$. For this reason, it is appropriate to report the mental age data for the sample and also for each grade, as well as by sex. Table 25 shows the mean mental age and standard deviations at each grade, for the males and females, as well as for the entire sample. Since mental age is dependent upon chronological age, as well as test performance, the means increased directly with grade.

Insert Table 25 about here

Table 25 also shows the means and standard deviations for males and females and for the entire sample. The difference between males and females in terms of mental age is not statistically significant.

Table 26 contains the item difficulty of all items for the entire sample. Tables 27-29 contain this data for each grade. It should be remembered that in scoring the tests, credit was given for all items

below the subject's basal age and all items above his ceiling were marked as failures.

Insert Tables 26-29 about here

On inspection of these tables, it can be noted that, in general, the abstract verbal items, vocabulary, absurdities, similarities, and comprehensions appear at too low a level on the 1960 Stanford-Binet with respect to this sample. On the other hand, rote memory items, days of the week, making change, repeating digits, and sentence memory are placed at too high a level on the scale as based on this sample. In comparing the items of the Binet which are generally considered to be performance items with those generally considered to be items testing verbal ability, there is little difference. This finding is not in keeping with the reports of some writers (Shay, 1958).

An item analysis was made of the Stanford-Binet items to determine their internal consistency with respect to this sample. The procedure for the item analysis was the same as that used for the 1960 and 1937 Revisions of the Stanford-Binet. That is, a biserial correlation was made between the proportion passing the given item and the over-all MA at each chronological age. Tables 30-36 present this data for ages 6-12. It should be noted that ages 9-12 contain some fourth-, fifth-, and sixth-grade children used by another investigator. Due to the expense and time, it was not possible to do an item analysis for grades one, two, and three alone.

Insert Tables 30-36 about here

Discussion

The results indicate that there is nearly a 20-IQ-point difference between the mean standardization score of the 1960 Stanford-Binet and the mean of this sample. Special consideration should be given to the variable of social class, since it was studied, and also to the testing instrument, which may account for part of this difference.

As was observed in the results, the difference in mean IQ for the various social classes is highly significant. It was noted in the introduction that this is consistent with the results of several other studies which found social class to be directly related to intelligence test scores. Therefore, as about two-thirds of the sample on whom socio-economic data was available is in the very lowest social class and about 90 per cent in the lowest two classes, the factor of social class alone could be expected to bring the mean score of the sample down considerably.

With respect to the testing instrument, it has already been observed that the 1960 Stanford-Binet does not appear to have had an adequate standardization sample. Since the mean IQ of this sample is different from most of the data available using the 1916 or 1937 Stanford-Binet scales on first-, second-, and third-grade Negro school children in the Southeast, it is possible that the new Binet will also yield mean scores different from those obtained using the 1916 or 1937 Stanford-Binet when administered to other large samples in the Southeast. Further investigation of this problem is warranted on the basis of this research.

Another interesting observation from the results is that the standard deviation for the Negro sample is considerably smaller than that of Terman and Merrill's standardization sample. This would seem to

indicate that the sample of this research constitutes a more homogeneous group than the white sample used for the original Binet standardization. It is possible that this homogeneity stems from the Negro culture being somewhat separated from the white, particularly in the southeastern states where the study was conducted. Or, possibly, the fact that most of the sample came from the lower socio-economic class restricted the variability of the scores.

The observation that the mean IQs decreased as chronological age increased is not unique to this research (Shuey, 1958). This same phenomena occurs in rural white groups and in other groups whose culture and education are somewhat restricted. Therefore, one possible explanation for this phenomenon is that the different cultural, home, and school atmosphere causes a greater difference as age increases between the Negro population and the native-born white population on whom the test was standardized.

An analysis of the tables showing item difficulty indicates that the Negro children of this sample did comparatively poorer on certain items than the white standardization sample and comparatively better on other items. As has been pointed out by Dreger and Miller (1960), this may be due to the fact that Negro children must perform different tasks and behave in different ways from most white children in order to survive and thrive in their culture.

It should be stressed that the purpose of this research was not in any way to answer the question of whether "race" per se is related to intelligence and any attempt to use it as evidence for this will be a misuse of the data. In order for this study to answer this question it would, among other things, have had to control the nine variables which

were mentioned as factors to be considered in the evaluation of the intelligence test scores of Negro children. Since this research was not designed to control any of these variables, the variable of race could not possibly be isolated and no statements with reference to the effect of race can be made.

Summary

The 1960 Revision of the Stanford-Binet Intelligence Scale was administered to 900 first-, second-, and third-grade Negro elementary-school children from the five southeastern states of Alabama, Georgia, Florida, South Carolina, and Tennessee. Analysis of the results indicated that the mean IQ of the total group was 80.82 and the standard deviation 12.40. No significant differences in IQ were found between the grades and sexes, although there were significant differences in IQ for age, socio-economic status, and community size beyond the .01 level. The implications of these results were discussed.

An analysis of difficulty showed that the performance of the Negro sample differed on several items from the standardization sample of the 1937 and 1960 Stanford-Binets.

References

- Arlitt, Ada H. On the need for caution in establishing race norms. *J. appl. Psychol.*, 1921, 5, 179-183.
- Arlitt, Ada H. The relation of intelligence to age in Negro children. *J. appl. Psychol.*, 1922, 6, 378-384.
- Barnes, J. R. The intelligence of Negro children. Unpublished master's thesis, Univer. of Kansas, 1921.
- Beckham, A. S. A study of the intelligence of colored adolescents of different social-economic status in typical metropolitan areas. *J. soc. Psychol.*, 1933, 4, 70-91.
- Bruce, Myrtle. Factors affecting intelligence test performance of whites and Negroes in the rural South. *Arch. Psychol.*, 1940, No. 252.
- Canady, H. G. The psychology of the Negro. In P. L. Harriman (Ed.), *The encyclopedia of psychology*. New York: Philosophical Library, 1946, Pp. 407-416.
- Clarke, D. P. Stanford-Binet Scale "L" response patterns in matched racial groups. *J. Negro Educ.*, 1941, 10, 230-238.
- Dreger, R. M., & Miller, K. S. Comparative psychological studies of Negroes and whites in the United States. *Psychol. Bull.*, 1960, 57, 361-402.
- Garth, T. A. *Race psychology: a study of racial mental differences*. New York: McGraw-Hill, 1931.
- Graham, Virginia T. Health studies of Negro children. I. Intelligence studies of Negro children in Atlanta, Georgia. *Publ. Health Rep.*, 1926, 41, 2759-2783.
- Higgins, C., & Sivers, Cathryne H. A comparison of Stanford-Binet and Colored Ravens Progressive Matrices IQs for children with low socio-economic status. *J. consult. Psychol.*, 1958, 20, 465-468.
- Jenkins, M. D. Case studies of Negro children of Binet IQ 160 and above. *J. Negro Educ.*, 1943, 12, 159-166.
- Klineberg, O. *Negro intelligence and selective migration*. New York: Columbia Univer. Press, 1935.
- Klineberg, O. *Race differences*. New York: Harper, 1935.

- Lacy, L. D. Relative intelligence of white and colored children. *Elementary Sch. J.*, 1926, 36, 942-946.
- Lambert, Martha, & Lanier, L. H. Race differences in speed of reaction. *J. educ. Psychol.*, 1933, 43, 255-277.
- Long, H. H. Analysis of test results from third grade children selected on the basis of socio-economic status. Unpublished doctoral dissertation, Harvard Univer., 1933.
- McClure, W., & Demeruth, H. J. Negro versus white intelligence: a continuing controversy. *Harvard educ. Rev.*, 1938, 8, 120-135.
- McGuire, C., & White, O. D. The measurement of racial stigma. Research paper in human development No. 3 (revised), Dep. of Educ. Psychol., The Univer. of Texas, 1935.
- North, R. D. The intelligence of American Negroes. New York: Anti-Defamation League of B'nai B'rith, 1937.
- Oden, R. W. Negro children in the public schools of Philadelphia. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1913, 49, 184-204.
- Peterson, J. The comparable abilities of white and Negro children. *Ann. Psychol. Monographs*, 1923, No. 3, 1-141.
- Peterson, J., & Lanier, L. H. Studies in the comparative abilities of whites and Negroes. *Ann. Educ. Monographs*, 1929, No. 3, 1-156.
- Phillips, R. A. The Binet test applied to colored children. *Psychol. Clin.*, 1914, 8, 190-196.
- Pictor, R. Intelligence testing: methods and results. New York: Holt, 1931.
- Schwegler, R. A., & Wynn, Edith. A comparative study of the intelligence of white and colored children. *J. educ. Res.*, 1920, 2, 338-348.
- Shoberg, Myra. An investigation into the validity of norms, with special reference to urban and rural groups. *Arch. Psychol.*, 1929, No. 104.
- Stacy, Audrey H. The testing of Negro intelligence. Lynchburg: Bell, 1930.
- Strahan, Lexie. Distribution of intelligence quotients of twenty-two thousand primary-school children. *J. educ. Psychol.*, 1926, 14, 169-177.

- Strong, Alice. Three hundred and fifty white and colored children measured by Binet-Simon measuring scale of intelligence: a comparative study. *Educ. Review*, 1913, 30, 485-515.
- Sunn, Peggy. A comparative study of white and Negro children. *J. Am. Psychol.*, 1917, 1, 71-83.
- Terman, L. M., & Merrill, Ned A. *Measuring Intelligence*. Boston: Houghton Mifflin, 1917.
- Terman, L. M., & Merrill, Ned A. *Stanford-Binet Intelligence scale*. Boston: Houghton Mifflin, 1918.
- Todman, Helen. Differences between pre-school Negro children and their older siblings on the Stanford-Binet scales. *J. Educ. Psychol.*, 1944, 33, 474-477.
- U.S. Bureau of the Census. *U.S. Census of Population, 1960. General Population Characteristics*. Washington, D. C.: U.S. Government Printing Office, 1961, Final Rep. PC(1)-2b.
- Wells, J. R. The application of the Binet-Simon tests to groups of white and colored school children. *Educ. Review*, 1913, 30, 52-58.
- Weyl, R. *The Negro in American civilization*. Washington Public Affairs Press, 1941.

Table 1

Studies Using a Binet Scale to Test Negro School Children

Author	Date	Location	Test	Number
Strong, Alice	1913	Columbia, South Carolina	Goddard-Binet	123
Oden, H. W.	1913	Philadelphia, Pennsylvania	Goddard-Binet	300
Phillips, R. A.	1914	Philadelphia, Pennsylvania	Goddard-Binet	86
Wells, O. R.	1915	Oberlin, Ohio	Goddard-Binet	96
Burns, Nagv	1917	New Orleans, Louisiana	Goddard-Binet and Yerkes-Bridges- Harshbarger Point Scale	136
Burns, Nagv	1925	New Orleans, Louisiana	Yerkes-Bridges- Harshbarger Point Scale and 1916 Stanford- Binet	1075 947
Peterson, J. Lester, L. H.	1929	New York City	Yerkes-Bridges- Harshbarger Point Scale	137
Plummer, R. Keller, R.	1922	Youngstown, Ohio	Children's Service Bureau of Youngstown Revision of the 1916 Stanford-Binet	71
Schugler, R. A. Winn, Edith	1930	Lawrence, Kansas	1916 Stanford-Binet	58
Barnes, J. R.	1931	Lawrence, Kansas	1916 Stanford-Binet	210
Wright, Ada E.	1931	Unidentified	1916 Stanford-Binet	71

Table 1--Continued

Age	Grade	Results
5 - 15		29.4% one or more years below their CI, 69.8% at their CI, and 1% above their CI
5 - 15		26% one or more years below their CI, 77% at their CI, 5% above their CI
8 - 9.54		24.4% one or more years below their CI, 70.5% at their CI, 6.9% above their CI
6 - 16		Negro children not significantly different from white.
	2 - 7	Negro children scored slightly below norm.
5 - 16		Negro children generally score below white children.
12	4 - 8	Negro children compared favorably with white children.
	Elementary thru 8	Mean IQ = 88
	7 and 8	Median IQ = 89.3
5 - 17		Mean IQ = 86.2, SD = 14.8
	Primary	Median IQ = 83.4

(Table continued on next page)

Table 1--Continued

Author	Date	Location	Test	Score
Arlett, Ada H.	1922	New Orleans, Louisiana and Philadelphia, Pennsylvania neighborhood	1916 Stanford-Binet	243
Graham, Virginia	1926	Atlanta, Georgia	1916 Stanford-Binet	103
Lacy, L. D.	1926	Oklahoma City, Oklahoma	1916 Stanford-Binet	817
Strochan, Lexie	1926	Kansas City, Missouri	1916 Stanford-Binet	904
Reckman, A. S.	1933	New York City, Washington, DC Baltimore, Maryland, and an industrial school	1916 Stanford-Binet	1100
Long, H. H.	1933	Washington, DC	1916 Stanford-Binet	200
Leberth, Martha Lester, L. H.	1933	Nashville, Tennessee	1916 Stanford-Binet	20
Winstberg, O.	1935	New York City	1916 Stanford-Binet	421
Brown, Myrtle	1940	Rural county in Virginia	1916 Stanford-Binet	72

Table 1—Continued

Age	Grade	Results		
5 - 15		Median IQ	Girls	Age
		100.5		5 and 6
		90.9		7
		87.5		8
		86.2		9
		77.5		10 - 15
		Median IQ	Boys	Age
		94.8		5 and 6
		90.9		7
		88.0		8
		83.3		9
		78.4		10 - 15
6 - 7		Age 6, Mean IQ = 103.2, S.D. = 11.32		
		Age 7, Mean IQ = 94.8, S.D. = 10.72		
5 - 12	Kindergarten thru 3	Mean IQ = 91		
	Kindergarten thru 3	1921-1924 Group	Median IQ	
		Kindergarten	96.79	
		1st grade	91.30	
		2nd grade	80.30	
		Total Group Median	93.45	
		1924-1925 Group	91.00	
	Mean=13.79	Group	Mean IQ	S.D.
		New York	104.70	9.21
		Washington	97.70	12.50
		Baltimore	95.70	13.10
		Delinquents	86.00	12.80
	3	Mean IQ = 104.5		
12		Median IQ = 77.30		
		Mean IQ = 73.00		
		S.D. = 10.90		
10		New York born, Mean IQ = 89.8		
		Southern born, Mean IQ = 85.6		
6 - 12		Mean IQ = 76.33		
		S.D. = 14.22		
		Median IQ = 70.17		

(Table continued on next page)

Table 1--Continued

Author	Date	Location	Test	Number
Clarke, D. P.	1941	New York Training School for Boys	1937 Stanford-Binet	116
Jenkins, M. D.	1943	Northern Metropolitan areas	1937 Stanford-Binet	14
Tomlinson, Helen	1944	Near Austin, Texas	1937 Stanford-Binet	150
Klugman, S. F.	1944	Unidentified	1937 Stanford-Binet	34
Higgins, C. Sivers, C. H.	1958	Northeastern city	1937 Stanford-Binet	349
McCord, W. H. Demeruth, H. J.	1958	Cambridge and Somerville, Massachusetts	1939 Stanford-Binet	71

Table 1--Continued

Age	Grade	Results
14 - 16		Mean IQ = 90.40 S.D. = 7.80
5 - 10		IQs all above 100
4 - 9		Mean IQ = 89.60 S.D. = 12.00
7 - 14		Mean IQ = 98.00 S.D. = 5.16
7 - 9		Mean IQ = 90.30 S.D. = 13.20
10		Scores not significantly different from a comparable white group.

Table 2

Negro Population in the Five Southeastern States

State	Total Negro Population	% of Negroes in Total Population
Alabama	980,271	30
Florida	880,186	18
Georgia	1,122,996	28
South Carolina	829,291	35
Tennessee	586,876	16

Table 3
Negro Population Distribution with Respect to
Size of Community (1960 Census)

State	County Size		
	Metropolitan	Urban	Rural
Alabama			
County	Jefferson	Houston	Clarke
Number	219,663	13,877	12,740
Per Cent	34.6	27.4	42.5
Florida			
County	Dade	Essex	Osceola
Number	139,322	36,330	24,942
Per Cent	14.9	20.9	29.4
Georgia			
County	DeKalb, Fulton	Dougherty	Brooks
Number	414,942	26,034	7,462
Per Cent	21.8	34.4	48.8
South Carolina			
County	Richland	Greenville	Spartan
Number	65,233	36,921	35,072
Per Cent	32.6	17.6	46.8
Tennessee			
County	Shelby	Hamilton	Lincoln
Number	228,235	47,343	3,145
Per Cent	36.4	19.9	13.2
Total Number	1,069,395	160,525	83,361

Table 4
Distribution of Occupations for Negroes
in the Southeast (1950 Census)

McQuire-White Scale Value	Number in the Southeast	Per Cent in Class
1	46,719	3
2	180,036	13
3	44,869	3
4	60,016	4
5	271,189	15
6	241,067	17
7	639,271	45
Total	1,433,117	100

Table 5
Distribution of Occupations for the Negro Population
of Alabama (1930 Census)

McQuire-White Scale Value	Alabama		Three Counties	
	Number	Per Cent	Number	Per Cent
1	11,340	3	2,754	3
2	49,711	15	2,028	3
3	9,779	3	3,612	4
4	13,277	4	4,469	6
5	57,109	18	22,316	28
6	52,136	16	13,400	17
7	131,342	41	30,536	39
Total	324,694	100	79,219	100

Table 6
Distribution of Competitions for the Negro Population
of Florida (1930 Census)

McQuire-White Scale Value	Florida		Three Counties	
	Number	Per Cent	Number	Per Cent
1	7,826	3	1,302	3
2	7,182	3	302	1
3	9,699	4	1,436	3
4	9,664	4	2,003	4
5	35,323	14	6,247	13
6	44,864	18	9,954	21
7	136,673	54	26,500	55
Total	251,222	100	48,143	100

Table 7
Distribution of Occupations for the Negro Population
of Georgia (1950 Census)

Machine-White Scale Value	Georgia		Three Counties	
	Number	Per Cent	Number	Per Cent
1	11,559	3	2,813	3
2	44,656	12	1,897	2
3	12,973	3	4,375	6
4	15,515	4	4,565	6
5	62,402	16	13,717	19
6	79,940	18	14,949	21
7	169,475	44	39,459	43
Total	398,639	100	71,265	100

Table 8
Distribution of Competitions for the Negro Population
of South Carolina (1950 Census)

Relative-White Scale Value	South Carolina		Three Counties	
	Number	Per Cent	Number	Per Cent
1	9,149	3	1,796	5
2	53,308	20	4,028	10
3	4,977	2	1,037	3
4	11,048	4	2,418	6
5	32,937	12	6,094	15
6	38,534	14	7,730	19
7	132,489	45	24,924	42
Total	372,512	100	40,855	100

Table 9
Distribution of Occupations for the Negro Population
of Tennessee (1930 Census)

McDowell-White Scale Value	Tennessee		Three Counties	
	Number	Per Cent	Number	Per Cent
1	6,875	3	2,502	3
2	23,100	12	3,333	4
3	8,301	4	4,552	5
4	10,402	6	5,732	6
5	23,349	12	20,803	24
6	34,673	18	14,846	17
7	79,300	40	35,504	42
Total	194,040	100	87,270	100

Table 18
Educational Attainment of the Negro Population Over
25 Years of Age in the Southeast (1930 Census)

Negro-White		
Scale Value	Number	Per Cent
1 and 2	39,775	1
3	35,940	2
4	66,330	4
5	88,305	5
6	121,745	12
7	1,424,420	76
Total^a	1,856,195	100

^aThere were 49,770 not reported.

Table 11
Educational Attainment of the Negro Population Over
25 Years of Age in Alabama (1930 Census)

Native-Born		
Scale Value	Number	Per Cent
1 and 2	6,345	1
3	8,455	2
4	17,205	4
5	22,530	5
6	52,170	12
7	337,495	76
Total^a	444,495	100%

^aThere were 11,360 not reported.

Table 12
Educational Attainment of the Negro Population Over
25 Years of Age in Florida (1950 Census)

McQuire-White Scale Value	Number	Per Cent
1 and 2	5,340	1
3	5,670	2
4	15,135	5
5	17,775	6
6	44,370	14
7	222,965	72
Total ^a	311,075	100%

^aThere were 12,520 not reported.

Table 13

**Educational Attainment of the Negro Population Over
25 Years of Age in Georgia (1950 Census)**

Machine-White Scale Value	Number	Per Cent
1 and 2	6,930	1
3	9,190	2
4	13,400	3
5	19,715	4
6	44,410	9
7	296,670	61
Total^a	471,315	100%

^aThere were 11,730 not reported.

Table 14
Educational Attainment of the Negro Population Over
25 Years of Age in South Carolina (1950 Census)

Negro-White		
Scale Value	Number	Per Cent
1 and 2	5,910	2
3	5,635	2
4	5,600	1
5	11,875	4
6	29,190	9
7	272,615	82
Total^a	330,825	100%

^aThere were 7,520 not reported.

Table 15
Educational Attainment of the Negro Population Over
15 Years of Age in Tennessee (1950 Census)

McQuire-White Scale Value	Number	Per Cent
1 and 2	5,770	2
3	6,770	2
4	14,990	5
5	17,360	6
6	51,605	19
7	102,835	66
Total^a	270,530	100%

^aThere were 6,340 not reported.

Table 16

Educational Attainment of the Parents of the Subjects

McQuire-White Scale Value	Number of Parents in Classification	Per Cent
1	3	.3
2	20	2.2
3	26	2.9
4	138	15.3
5	150	16.7
6	172	19.1
7	159	15.5
Unobtained	252	28.0
Total	900	100.0

Table 17

Occupational Status of the Parents of the Subjects

McQuire-White Scale Value	Number of Parents in Classification	Per Cent
1	1	.1
2	9	1.0
3	24	2.7
4	44	4.9
5	155	17.2
6	323	36.5
7	300	33.3
Unobtained	39	4.3
Total	900	100.0

Table 18

Stanford-Binet IQ Frequency Distribution for the Total Sample

IQ	Freq.	Cumul. Freq.	Cumul. Per Cent	IQ	Freq.	Cumul. Freq.	Cumul. Per Cent
42	1	1	0.1	63	12	67	7.4
43	0	1	0.1	64	10	77	8.6
44	0	1	0.1	65	10	87	9.7
45	0	1	0.1	66	19	106	11.8
46	0	1	0.1	67	15	121	13.4
47	1	2	0.2	68	22	143	15.9
48	0	2	0.2	69	17	160	17.8
49	2	4	0.4	70	26	186	20.7
50	2	6	0.7	71	19	205	22.8
51	0	6	0.7	72	16	221	24.5
52	2	8	0.9	73	29	250	27.8
53	0	8	0.9	74	21	271	30.1
54	4	12	1.3	75	25	296	32.9
55	2	14	1.4	76	30	326	36.2
56	2	16	1.7	77	40	366	40.7
57	3	19	2.1	78	33	399	44.3
58	6	25	2.8	79	28	427	47.4
59	4	29	3.2	80	42	469	52.1
60	5	34	3.8	81	23	492	54.7
61	9	43	4.8	82	25	517	57.4
62	12	55	6.1	83	31	548	60.9

(Table continued on next page)

Table 18--Continued

IQ	Freq.	Cumul. Freq.	Cumul. Per Cent	IQ	Freq.	Cumul. Freq.	Cumul. Per Cent
84	26	574	63.8	108	3	882	98.0
85	29	603	67.0	109	1	883	98.1
86	25	628	69.8	110	5	888	98.7
87	20	648	72.0	111	3	891	99.0
88	22	670	74.4	112	1	892	99.1
89	29	699	77.7	113	2	894	99.3
90	18	717	79.7	114	0	894	99.3
91	15	732	81.3	115	0	894	99.3
92	18	750	83.3	116	1	895	99.4
93	15	765	85.0	117	0	895	99.4
94	17	782	86.9	118	0	895	99.4
95	10	792	88.0	119	0	895	99.4
96	11	803	89.2	120	0	895	99.4
97	13	816	90.7	121	1	896	99.5
98	8	824	91.5	122	1	897	99.7
99	9	833	92.5	123	0	897	99.7
100	12	845	93.9	124	1	898	99.8
101	9	854	94.9	125	0	898	99.8
102	10	864	96.0	126	1	899	99.9
103	3	867	96.3	127	0	899	99.9
104	4	871	96.8	128	0	899	99.9
105	2	873	97.0	129	0	899	99.9
106	2	875	97.2	130	1	900	100.0
107	4	879	97.6				

Table 19

Stanford-Binet IQ Percentile Equivalents

Percentile	Negro	1937 Stanford-Binet Sample IQ	Percentile	Negro	1937 Stanford-Binet Sample IQ
	Sample IQ			Sample IQ	
1	50	63	20	70	88
2	57	63	21	70	89
3	58	71	22	71	89
4	60	74	23	71	90
5	61	76	24	72	90
6	62	77	25	72	91
7	63	78	26	72	91
8	64	79	27	73	92
9	64	80	28	73	92
10	65	81	29	74	93
11	66	82	30	74	93
12	66	83	31	74	94
13	67	84	32	75	94
14	67	84	33	75	95
15	68	85	34	75	95
16	68	86	35	76	96
17	69	86	36	76	96
18	69	87	37	76	96
19	70	87	38	76	97

(Table continued on next page)

Table 19--Continued

Percentile	Negro Sample IQ	1937 Stanford- Binet Sample IQ	Percentile	Negro Sample IQ	1937 Stanford- Binet Sample IQ
39	77	97	62	83	107
40	77	98	63	84	107
41	77	98	64	84	107
42	77	99	65	84	108
43	78	99	66	85	108
44	78	99	67	85	109
45	78	100	68	85	109
46	79	100	69	86	109
47	79	101	70	86	110
48	79	101	71	87	110
49	79	101	72	87	111
50	80	102	73	87	111
51	80	102	74	88	112
52	80	102	75	88	112
53	80	103	76	88	113
54	81	103	77	89	114
55	81	104	78	89	114
56	82	104	79	90	115
57	82	104	80	90	115
58	82	105	81	91	116
59	82	105	82	91	117
60	83	106	83	92	117
61	83	106	84	92	118

(Table continued on next page)

Table 19--Continued

Percentile	Negro Sample IQ	1937 Stanford- Binet Sample IQ	Percentile	Negro Sample IQ	1937 Stanford- Binet Sample IQ
85	93	119	93	99	126
86	94	119	94	100	127
87	94	120	95	101	129
88	95	121	96	102	131
89	96	122	97	105	134
90	97	123	98	108	136
91	97	124	99	111	139
92	99	125	100	-	-

Table 20

Binet IQ Means and SD for Males, Females and the Total Sample

Sex	Number	Mean	Standard Deviation
M	464	81.27	11.84
F	436	80.33	12.95
Total	900	80.82	12.40

Table 21

Binet IQ Means and SD by Chronological Age

Age	N	Mean	SD
5	19	86.00	6.40
6	227	84.43	12.48
7	243	81.71	11.80
8	282	80.63	11.85
9	101	74.59	10.74
10	20	64.75	7.28
11	5	67.80	7.70
12	2	66.00	11.00
13	1	42.00	0.00

Table 22

Binet IQ Means and SD by Grade

Grade	Number	Mean	Standard Deviation
1	300	81.81	12.43
2	300	80.33	12.79
3	300	80.25	11.90

Table 23

Binet IQ Means and SD by Socio-Economic Status

Socio-Economic Status	N	Mean	SD
1	2	93.50	3.50
2	11	93.27	10.25
3	50	90.56	14.73
4	136	84.40	12.15
5	436	79.62	11.84
Unknown	265	78.49	11.40

Table 24

Binet IQ Means and SD by Community Size

Community Size	N	Mean	SD
Rural	300	79.86	11.33
Urban	300	78.28	12.15
Metropolitan	300	84.33	12.87

Table 25

Binet MA Means and SD for Grades and Sexes

Grade	Number	Mean	SD
One			
Male	160	66.65	8.75
Female	140	66.50	8.98
Total	300	66.58	8.86
Two			
Male	160	78.61	10.47
Female	140	75.27	11.19
Total	300	77.05	10.94
Three			
Male	144	87.88	10.82
Female	156	85.75	11.13
Total	300	86.77	11.04
Total Male	464	77.36	13.23
Total Female	436	76.21	13.17
Total Sample	900	76.80	13.22

Table 26

Item Difficulty of Binet Items--Grades One, Two, and Three

Subtest	Item	Number Passing	Per Cent	Subtest	Item	Number Passing	Per Cent
2	1	900	100	4-6	1	890	99
2	2	900	100	4-6	2	848	92
2	3	900	100	4-6	3	883	98
2	4	900	100	4-6	4	870	97
2	5	900	100	4-6	5	864	96
2	6	900	100	4-6	6	876	97
2	A	900	100	4-6	A	875	97
2-6	1	900	100	5	1	829	92
2-6	2	900	100	5	2	822	91
2-6	3	900	100	5	3	861	96
2-6	4	900	100	5	4	848	94
2-6	5	900	100	5	5	868	96
2-6	6	900	100	5	6	728	81
2-6	A	900	100	5	A	875	97
3	1	900	100	6	1	322	36
3	2	900	100	6	2	554	62
3	3	900	100	6	3	711	79
3	4	900	100	6	4	756	84
3	5	900	100	6	5	585	65
3	6	900	100	6	6	727	81
3	A	899	100	6	A	684	74
3-6	1	897	100	7	1	378	42
3-6	2	899	100	7	2	280	31
3-6	3	900	100	7	3	340	38
3-6	4	898	100	7	4	329	37
3-6	5	899	100	7	5	433	48
3-6	6	897	100	7	6	453	50
3-6	A	895	100	7	A	413	46
4	1	897	100	8	1	91	10
4	2	896	100	8	2	316	35
4	3	890	99	8	3	83	9
4	4	895	100	8	4	155	17
4	5	892	100	8	5	146	16
4	6	888	99	8	6	365	41
4	A	885	99	8	A	202	22

(Table continued on next page)

Table 26--Continued

Subtest	Item	Number Passing	Per Cent	Subtest	Item	Number Passing	Per Cent
9	1	71	8	14	1	0	0
9	2	42	5	14	2	0	0
9	3	100	11	14	3	0	0
9	4	98	11	14	4	0	0
9	5	153	17	14	5	0	0
9	6	103	11	14	6	0	0
9	A	94	10	14	A	0	0
10	1	9	1	AA	1	0	0
10	2	38	4	AA	2	0	0
10	3	8	1	AA	3	0	0
10	4	19	2	AA	4	0	0
10	5	42	5	AA	5	0	0
10	6	63	7	AA	6	0	0
10	A	14	2	AA	7	0	0
11	1	22	2	AA	8	0	0
11	2	2	0	AA	A	0	0
11	3	1	0	SA-1	1	0	0
11	4	41	5	SA-1	2	0	0
11	5	14	2	SA-1	3	0	0
11	6	9	1	SA-1	4	0	0
11	A	3	0	SA-1	5	0	0
12	1	0	0	SA-1	6	0	0
12	2	3	0	SA-1	A	0	0
12	3	2	0	SA-2	1	0	0
12	4	10	1	SA-2	2	0	0
12	5	0	0	SA-2	3	0	0
12	6	2	0	SA-2	4	0	0
12	A	8	1	SA-2	5	0	0
13	1	1	0	SA-2	6	0	0
13	2	0	0	SA-2	A	0	0
13	3	4	0	SA-3	1	0	0
13	4	0	0	SA-3	2	0	0
13	5	3	0	SA-3	3	0	0
13	6	1	0	SA-3	4	0	0
13	A	0	0	SA-3	5	0	0
				SA-3	6	0	0
				SA-3	A	0	0

Table 27

Item Difficulty of Binet Items--Grade One

Subtest	Item	Number Passing	Subtest	Item	Number Passing
2	1	300	4-6	1	292
2	2	300	4-6	2	256
2	3	300	4-6	3	286
2	4	300	4-6	4	273
2	5	300	4-6	5	278
2	6	300	4-6	6	279
2	A	300	4-6	A	280
2-6	1	300	5	1	245
2-6	2	300	5	2	240
2-6	3	300	5	3	271
2-6	4	300	5	4	258
2-6	5	300	5	5	274
2-6	6	300	5	6	183
2-6	A	300	5	A	285
3	1	300	6	1	50
3	2	300	6	2	97
3	3	300	6	3	183
3	4	300	6	4	192
3	5	300	6	5	114
3	6	300	6	6	192
3	A	299	6	A	169
3-6	1	297	7	1	50
3-6	2	299	7	2	44
3-6	3	300	7	3	47
3-6	4	298	7	4	35
3-6	5	299	7	5	66
3-6	6	297	7	6	65
3-6	A	296	7	A	44
4	1	298	8	1	3
4	2	296	8	2	30
4	3	292	8	3	6
4	4	295	8	4	10
4	5	293	8	5	10
4	6	290	8	6	30
4	A	289	8	A	13

(Table continued on next page)

Table 27--Continued

Subtest	Item	Number Passing	Subtest	Item	Number Passing
9	1	2	14	1	0
9	2	0	14	2	0
9	3	7	14	3	0
9	4	4	14	4	0
9	5	1	14	5	0
9	6	1	14	6	0
9	A	2	14	A	0
10	1	0	AA	1	0
10	2	0	AA	2	0
10	3	0	AA	3	0
10	4	0	AA	4	0
10	5	1	AA	5	0
10	6	1	AA	6	0
10	A	0	AA	7	0
11	1	1	AA	8	0
11	2	0	AA	A	0
11	3	0	SA-1	1	0
11	4	1	SA-1	2	0
11	5	0	SA-1	3	0
11	6	0	SA-1	4	0
11	A	0	SA-1	5	0
12	1	0	SA-1	6	0
12	2	0	SA-1	A	0
12	3	0	SA-2	1	0
12	4	0	SA-2	2	0
12	5	0	SA-2	3	0
12	6	0	SA-2	4	0
12	A	0	SA-2	5	0
13	1	0	SA-2	6	0
13	2	0	SA-2	A	0
13	3	0	SA-3	1	0
13	4	0	SA-3	2	0
13	5	0	SA-3	3	0
13	6	0	SA-3	4	0
13	A	0	SA-3	5	0
			SA-3	6	0
			SA-3	A	0

Table 28

Item Difficulty of Binet Items--Grade Two

Subtest	Item	Number Passing	Subtest	Item	Number Passing
2	1	300	4-6	1	298
2	2	300	4-6	2	294
2	3	300	4-6	3	297
2	4	300	4-6	4	297
2	5	300	4-6	5	288
2	6	300	4-6	6	297
2	A	300	4-6	A	295
2-6	1	300	5	1	237
2-6	2	300	5	2	287
2-6	3	300	5	3	291
2-6	4	300	5	4	290
2-6	5	300	5	5	297
2-6	6	300	5	6	256
2-6	A	300	5	A	291
3	1	300	6	1	113
3	2	300	6	2	185
3	3	300	6	3	240
3	4	300	6	4	273
3	5	300	6	5	209
3	6	300	6	6	249
3	A	300	6	A	235
3-6	1	300	7	1	123
3-6	2	300	7	2	91
3-6	3	300	7	3	114
3-6	4	300	7	4	128
3-6	5	300	7	5	148
3-6	6	300	7	6	165
3-6	A	299	7	A	154
4	1	299	8	1	26
4	2	300	8	2	107
4	3	299	8	3	25
4	4	300	8	4	47
4	5	299	8	5	39
4	6	298	8	6	113
4	A	296	8	A	62

(Table continued on next page)

Table 28--Continued

Subtest	Item	Number Passing	Subtest	Item	Number Passing
9	1	24	14	1	0
9	2	13	14	2	0
9	3	38	14	3	0
9	4	31	14	4	0
9	5	35	14	5	0
9	6	27	14	6	0
9	A	23	14	A	0
10	1	3	AA	1	0
10	2	4	AA	2	0
10	3	0	AA	3	0
10	4	5	AA	4	0
10	5	12	AA	5	0
10	6	19	AA	6	0
10	A	1	AA	7	0
11	1	6	AA	8	0
11	2	1	AA	A	0
11	3	0	SA-1	1	0
11	4	9	SA-1	2	0
11	5	5	SA-1	3	0
11	6	1	SA-1	4	0
11	A	0	SA-1	5	0
12	1	0	SA-1	6	0
12	2	1	SA-1	A	0
12	3	1	SA-2	1	0
12	4	2	SA-2	2	0
12	5	0	SA-2	3	0
12	6	0	SA-2	4	0
12	A	2	SA-2	5	0
13	1	0	SA-2	6	0
13	2	0	SA-2	A	0
13	3	0	SA-3	1	0
13	4	0	SA-3	2	0
13	5	0	SA-3	3	0
13	6	0	SA-3	4	0
13	A	0	SA-3	5	0
			SA-3	6	0
			SA-3	A	0

Table 29

Item Difficulty of Binet Items—Grade Three

Subtest	Item	Number Passing	Subtest	Item	Number Passing
2	1	300	46	1	300
2	2	300	46	2	298
2	3	300	46	3	300
2	4	300	46	4	298
2	5	300	46	5	298
2	6	300	46	6	300
2	A	300	46	A	300
2-6	1	300	5	1	297
2-6	2	300	5	2	295
2-6	3	300	5	3	299
2-6	4	300	5	4	300
2-6	5	300	5	5	297
2-6	6	300	5	6	289
2-6	A	300	5	A	299
3	1	300	6	1	159
3	2	300	6	2	262
3	3	300	6	3	288
3	4	300	6	4	291
3	5	300	6	5	262
3	6	300	6	6	286
3	A	300	6	A	280
3-6	1	300	7	1	205
3-6	2	300	7	2	145
3-6	3	300	7	3	179
3-6	4	300	7	4	176
3-6	5	300	7	5	219
3-6	6	300	7	6	214
3-6	A	300	7	A	215
4	1	300	8	1	60
4	2	300	8	2	179
4	3	299	8	3	52
4	4	300	8	4	98
4	5	300	8	5	97
4	6	300	8	6	222
4	A	300	8	A	127

(Table continued on next page)

Table 29--Continued

Subtest	Item	Number Passing	Subtest	Item	Number Passing
9	1	45	14	1	0
9	2	29	14	2	0
9	3	84	14	3	0
9	4	63	14	4	0
9	5	117	14	5	0
9	6	75	14	6	0
9	A	69	14	A	0
10	1	5	AA	1	0
10	2	32	AA	2	0
10	3	8	AA	3	0
10	4	14	AA	4	0
10	5	39	AA	5	0
10	6	43	AA	6	0
10	A	13	AA	7	0
			AA	8	0
			AA	A	0
11	1	15			
11	2	1	SA-1	1	0
11	3	1	SA-1	2	0
11	4	28	SA-1	3	0
11	5	9	SA-1	4	0
11	6	8	SA-1	5	0
11	A	3	SA-1	6	0
			SA-1	A	0
12	1	0			
12	2	2	SA-2	1	0
12	3	1	SA-2	2	0
12	4	8	SA-2	3	0
12	5	0	SA-2	4	0
12	6	2	SA-2	5	0
12	A	6	SA-2	6	0
			SA-2	A	0
13	1	1			
13	2	0	SA-3	1	0
13	3	4	SA-3	2	0
13	4	0	SA-3	3	0
13	5	3	SA-3	4	0
13	6	1	SA-3	5	0
13	A	0	SA-3	6	0
			SA-3	A	0

Table 30
Item Analysis (Biserial Correlation) of the Stanford-Binet
at Age Level Six

Subtest	Item	R_{bis}	Per Cent Passing	Subtest	Item	R_{bis}	Per Cent Passing
46	1	.72	96	9	1	..	..
46	2	.78	86	9	2	..	..
46	3	.85	95	9	3	..	..
46	4	.80	91	9	4	..	..
46	5	.60	93	9	5	..	..
46	6	.84	93	9	6	..	..
46	A	.70	93	9	A	..	..
5	1	.72	82	10	1	..	..
5	2	.61	79	10	2	..	..
5	3	.58	91	10	3	..	..
5	4	.66	86	10	4	..	..
5	5	.83	93	10	5	..	..
5	6	.61	59	10	6	..	..
5	A	.94	95	10	A	..	..
6	1	.75	15	11	1	..	..
6	2	.83	33	11	2	..	..
6	3	.79	61	11	3	..	..
6	4	.76	67	11	4	..	..
6	5	.76	41	11	5	..	..
6	6	.73	63	11	6	..	..
6	A	.69	57	11	A	..	..
7	1	.80	18	12	1	..	..
7	2	.71	15	12	2	..	..
7	3	.86	13	12	3	..	..
7	4	.85	14	12	4	..	..
7	5	.79	23	12	5	..	..
7	6	.78	26	12	6	..	..
7	A	.75	21	12	A	..	..
8	1	..	..	13	1	..	..
8	2	..	..	13	2	..	..
8	3	..	..	13	3	..	..
8	4	..	..	13	4	..	..
8	5	..	..	13	5	..	..
8	6	..	..	13	6	..	..
8	A	..	..	13	A	..	..

Table 31
Item Analysis (Biserial Correlation) of the Stanford-Binet
at Age Level Seven

Subtest	Item	R_{bis}	Per Cent Passing	Subtest	Item	R_{bis}	Per Cent Passing
4-6	1	..	..	9	1	.80	5
4-6	2	..	..	9	2	.79	3
4-6	3	..	..	9	3	.67	11
4-6	4	..	..	9	4	.92	9
4-6	5	..	..	9	5	.72	10
4-6	6	..	..	9	6	.74	8
4-6	A	..	..	9	A	.82	5
5	1	.55	93	10	1	..	..
5	2	.54	95	10	2	..	..
5	3	.60	96	10	3	..	..
5	4	.58	95	10	4	..	..
5	5	.66	97	10	5	..	..
5	6	.57	79	10	6	..	..
5	A	.44	97	10	A	..	..
6	1	.70	33	11	1	..	..
6	2	.80	56	11	2	..	..
6	3	.57	79	11	3	..	..
6	4	.54	87	11	4	..	..
6	5	.78	66	11	5	..	..
6	6	.62	80	11	6	..	..
6	A	.43	75	11	A	..	..
7	1	.86	31	12	1	..	..
7	2	.72	24	12	2	..	..
7	3	.60	36	12	3	..	..
7	4	.67	32	12	4	..	..
7	5	.74	43	12	5	..	..
7	6	.61	49	12	6	..	..
7	A	.67	42	12	A	..	..
8	1	.88	5	13	1	..	..
8	2	.75	28	13	2	..	..
8	3	.88	5	13	3	..	..
8	4	.89	12	13	4	..	..
8	5	.74	9	13	5	..	..
8	6	.84	33	13	6	..	..
8	A	.69	17	13	A	..	..

Table 32

Item Analysis (Biserial Correlation) of the Stanford-Binet
at Age Level Eight

Subtest	Item	R_{bis}	Per Cent Passing	Subtest	Item	R_{bis}	Per Cent Passing
4-6	1	..	..	9	1	.63	13
4-6	2	..	..	9	2	.62	9
4-6	3	..	..	9	3	.61	25
4-6	4	..	..	9	4	.65	19
4-6	5	..	..	9	5	.70	29
4-6	6	..	..	9	6	.66	21
4-6	A	..	..	9	A	.61	19
5	1	..	..	10	1	.88	2
5	2	..	..	10	2	.32	5
5	3	..	..	10	3	.56	2
5	4	..	..	10	4	.74	5
5	5	..	..	10	5	.81	12
5	6	..	..	10	6	.74	12
5	A	..	..	10	A	.69	4
6	1	.60	51	11	1	..	..
6	2	.74	80	11	2	..	..
6	3	.81	90	11	3	..	..
6	4	.76	95	11	4	..	..
6	5	.80	80	11	5	..	..
6	6	.74	92	11	6	..	..
6	A	.63	89	11	A	..	..
7	1	.76	64	12	1	..	..
7	2	.68	48	12	2	..	..
7	3	.59	51	12	3	..	..
7	4	.72	56	12	4	..	..
7	5	.59	64	12	5	..	..
7	6	.63	66	12	6	..	..
7	A	.58	64	12	A	..	..
8	1	.72	19	13	1	..	..
8	2	.66	55	13	2	..	..
8	3	.71	16	13	3	..	..
8	4	.76	30	13	4	..	..
8	5	.76	51	13	5	..	..
8	6	.76	63	13	6	..	..
8	A	.57	39	13	A	..	..

Table 33
Item Analysis (Biserial Correlation) of the Stanford-Binet
at Age Level Nine

Subtest	Item	R_{bis}	Per Cent Passing	Subtest	Item	R_{bis}	Per Cent Passing
F	1	..	..	9	1	.59	21
	2	..	..	9	2	.87	20
	3	..	..	9	3	.61	37
	4	..	..	9	4	.72	35
	5	..	..	9	5	.72	57
	6	..	..	9	6	.47	38
L	A	..	..	9	A	.63	34
	1	..	..	10	1	.77	6
	2	..	..	10	2	.59	14
	3	..	..	10	3	.86	9
	4	..	..	10	4	.81	12
	5	..	..	10	5	.73	27
U	6	..	..	10	6	.68	25
	A	..	..	10	A	.78	6
	1	..	..	11	1	.55	10
	2	..	..	11	2	.92	3
	3	..	..	11	3	.90	4
	4	..	..	11	4	.74	20
6	5	..	..	11	5	.87	10
	6	..	..	11	6	.89	9
	A	..	..	11	A	.66	4
	1	.67	76	12	1	..	..
	2	.76	62	12	2	..	..
	3	.62	72	12	3	..	..
7	4	.69	70	12	4	..	..
	5	.64	83	12	5	..	..
	6	.64	78	12	6	..	..
	A	.66	80	12	A	..	..
	1	.83	33	13	1	..	..
	2	.83	73	13	2	..	..
8	3	.83	33	13	3	..	..
	4	.83	46	13	4	..	..
	5	.83	43	13	5	..	..
	6	.83	83	13	6	..	..
	A	.89	32	13	A	..	..

Table 34

Item Analysis (Biserial Correlation) of the Stanford-Binet
at Age Level Ten

Subtest	Item	R_{bis}	Per Cent Passing	Subtest	Item	R_{bis}	Per Cent Passing
4	1	..	..	9	1	.59	42
4	2	..	..	9	2	.79	28
4	3	..	..	9	3	.42	48
4	4	..	..	9	4	.71	45
4	5	..	..	9	5	.70	71
4	6	..	..	9	6	.60	58
4	A	..	..	9	A	.64	44
5	1	..	..	10	1	.89	21
5	2	..	..	10	2	.52	18
5	3	..	..	10	3	.86	22
5	4	..	..	10	4	.75	26
5	5	..	..	10	5	.68	48
5	6	..	..	10	6	.59	38
5	A	..	..	10	A	.78	14
6	1	..	..	11	1	.47	17
6	2	..	..	11	2	.85	10
6	3	..	..	11	3	.97	14
6	4	..	..	11	4	.71	34
6	5	..	..	11	5	.75	25
6	6	..	..	11	6	.78	17
6	A	..	..	11	A	.62	6
7	1	.69	89	12	1	..	..
7	2	.77	80	12	2	..	..
7	3	.68	81	12	3	..	..
7	4	.71	79	12	4	..	..
7	5	.63	90	12	5	..	..
7	6	.71	84	12	6	..	..
7	A	.59	88	12	A	..	..
8	1	.80	56	13	1	..	..
8	2	.55	78	13	2	..	..
8	3	.83	50	13	3	..	..
8	4	.73	64	13	4	..	..
8	5	.77	60	13	5	..	..
8	6	.75	87	13	6	..	..
8	A	.60	67	13	A	..	..

Table 35
Item Analysis (Biserial Correlation) of the Stanford-Binet
at Age Level Eleven

Subtest	Item	R_{bis}	Per Cent Passing	Subtest	Item	R_{bis}	Per Cent Passing
4	1	..	..	9	1	.70	49
	2	..	..		2	.80	43
	3	..	..		3	.61	58
	4	..	..		4	.81	58
	5	..	..		5	.64	82
	6	..	..		6	.62	63
5	A	..	..		A	.62	49
	1	..	..	10	1	.86	31
	2	..	..		2	.67	31
	3	..	..		3	.87	32
	4	..	..		4	.70	39
	5	..	..		5	.74	56
	6	..	..		6	.71	43
6	A	..	..		A	.66	21
	1	..	..	11	1	.64	29
	2	..	..		2	.84	17
	3	..	..		3	.90	20
	4	..	..		4	.74	41
	5	..	..		5	.72	34
	6	..	..		6	.81	28
7	A	..	..		A	.75	18
	1	.65	94	12	1	.98	6
	2	.68	88		2	.96	15
	3	.74	87		3	.71	8
	4	.67	92		4	.83	23
	5	.58	97		5	.99	8
	6	.67	91		6	.77	15
8	A	.67	90		A	.72	23
	1	.76	67	13	1	.76	8
	2	.52	87		2	1.00	6
	3	.78	59		3	.92	13
	4	.75	71		4	.84	10
	5	.70	76		5	.95	6
	6	.65	95		6	.80	8
9	A	.52	80		A	.72	4

Table 36
Item Analysis (Biserial Correlation) of the Stanford-Binet
at Age Level Twelve

Subtest	Item	R_{bis}	Per Cent Passing	Subtest	Item	R_{bis}	Per Cent Passing
46	1	..	..	9	1	.64	44
46	2	..	..	9	2	.85	42
46	3	..	..	9	3	.48	53
46	4	..	..	9	4	.76	41
46	5	..	..	9	5	.66	81
46	6	..	..	9	6	.45	59
46	A	..	..	9	A	.58	41
5	1	..	..	10	1	.84	28
5	2	..	..	10	2	.69	28
5	3	..	..	10	3	.89	28
5	4	..	..	10	4	.82	37
5	5	..	..	10	5	.77	61
5	6	..	..	10	6	.65	46
5	A	..	..	10	A	.77	19
6	1	..	..	11	1	.55	22
6	2	..	..	11	2	.76	15
6	3	..	..	11	3	1.00	21
6	4	..	..	11	4	.74	43
6	5	..	..	11	5	.78	36
6	6	..	..	11	6	.91	17
6	A	..	..	11	A	.45	11
7	1	.72	93	12	1	1.10	6
7	2	.78	84	12	2	.91	17
7	3	.37	94	12	3	.78	9
7	4	.73	87	12	4	.61	26
7	5	.74	98	12	5	.76	8
7	6	.53	91	12	6	.79	14
7	A	.51	94	12	A	.78	17
8	1	.77	66	13	1	.64	6
8	2	.61	74	13	2	1.10	7
8	3	.83	58	13	3	.72	15
8	4	.76	71	13	4	.78	9
8	5	.71	72	13	5	1.04	8
8	6	.61	92	13	6	.93	13
8	A	.53	73	13	A	.86	7

